

# Mineral Industry Surveys

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#### **LEAD IN MARCH 2002**

Domestic mine production, based on the net quantity of lead recovered from concentrate, increased by 6% in March compared with that of February. Secondary refinery production increased by 7% in March, and reported consumption was up by about 2% in March, compared with corresponding data for the previous month.

According to Platts Metals Week published quotations, the average North American producer price and the average London Metal Exchange (LME) cash price (U.S. dollars) remained essentially unchanged in March compared with that of February.

Demand for lead in North America began to show some signs of increasing in March, mainly in the original equipment automotive battery sector, owing to an improving U.S. economy. A small increase in activity in the telecommunication sector provided some indication that the steep decline experienced in 2001 may have ended, thus suggesting a potential increase in demand for industrial batteries. The unusually mild winter, however, undermined any significant increase in the demand for replacement batteries. Battery manufacturers remained cautious about increasing their inventories, and appeared willing to wait for higher summer temperatures that, if extreme, would increase demand for replacement automotive batteries. In Europe, demand for lead remained soft, as mild temperatures in late winter continued to mute demand for replacement automotive batteries. Inventories of refined lead continued to be more than adequate, prompting a reluctance by most consumers to purchase lead in excess of their contract commitments (CRU International Ltd., 2002).

The National Defense Stockpile monthly cash disposal (sale) of lead in March was 3,841 metric tons (t) (4,234 short tons). Sale of lead through the first 6 months of fiscal year 2002 (October 2001 through September 2002) was 6,231 t (6,869 short tons).

North Korea reportedly is seeking investors to revitalize the country's lead and zinc industries. The Pyongyang-based Korea

Zinc Industrial Group (KZI) is offering to create a joint venture with an overseas producer, trader, or bank in order to modernize its Komdok mining complex and Danchon and Munpyong smelters. Both lead and zinc concentrates are produced at the Munpyong smelter. The smelter uses imported concentrates as well as concentrates processed from domestically mined ores (American Metal Market, 2002).

Australia's Pasminco Ltd., a major producer of lead and zinc, recently announced the sale of its Broken Hill zinc-lead mine to another Australian miner, Perilya Ltd. It is anticipated that Perilya will operate the mine at full production levels. A 50% reduction in output had been proposed by Pasminco for 2002. Pasminco has decided to retain ownership of its Century Mine, but will sell its Elura Mine and Cockle Creek smelter in Australia and its U.S. assets in Tennessee. Pasminco is currently in the hands of an administrator, who is formulating a restructuring proposal aimed at enabling Pasminco to repay its substantial accumulated debt (Platts Metals Week, 2002).

#### Undate

The Doe Run Resources Corp, St. Louis, MO, reached an agreement in principle to secure the necessary financing for restructuring its outstanding debt. Doe Run, a major producer of primary and recycled lead, expects the restructuring to be consummated by mid-June. According to a company spokesperson, definitive documentation on the financing was expected to be completed in May. The financing plan will be subject to shareholder approval (Metal Bulletin, 2002a).

Exide Technologies, Princeton, NJ, and its three U.S. subsidiaries—Exide Delaware, Exide Illinois, and Royal Battery Distributors—filed for Chapter 11 bankruptcy protection on April 15, 2002. Exide is a major producer of recycled lead and a manufacturer of lead acid batteries. The company has arranged for additional financing, which, subject to court approval, will allow it to continue normal operations (Metal Bulletin, 2002b).

#### **References Cited**

American Metal Market, 2002, North Korea seeks investors to revive lead, zinc plants: American Metal Market, v. 110, no. 59, March 27, p. 2.

CRU International Ltd., 2002, Market commentary: CRU Monitor—Lead, April, p. 2.

- Metal Bulletin, 2002a, Doe Run secures debt financing: Metal Bulletin, no. 8666, April 18, p. 5.

  Metal Bulletin, 2002b, Exide files for bankruptcy protection: Metal Bulletin, no.
- 8666, April 18, p. 9.
  Platts Metals Week, 2002, Australia's Pasminco sells Broken Hill lead-zinc mine:
- Platts Metals Week, v. 73, no. 10, March 11, p. 3.

#### TABLE 1 SALIENT LEAD STATISTICS IN THE UNITED STATES 1/

(Metric tons, lead content, unless otherwise specified)

	200	)1		2002	
	January - December	January - March	February	March	January - March
Production:					
Mine (recoverable)	450,000	108,000	35,500	37,500	113,000
Primary refinery	290,000	NA	NA	NA	NA
Secondary refinery:	•				
Reported by smelters/refineries	1,090,000	261,000	80,300	86,100	254,000
Estimated	11,000	2,630	810	869	2,560
Recovered from copper-base scrap e/	15,000	3,750	1,250	1,250	3,750
Total secondary	1,110,000	267,000	82,300	88,200	260,000
Stocks, end of period:					
Primary refineries	NA	NA	NA	NA	NA
Secondary smelters and consumers	86,100	60,200	84,200	85,600	85,600
Imports for consumption:					
Ore and concentrates (lead content)	2,240	2,240		NA	2/
Refined metal	271,000	77,300	10,800	NA	32,700 2/
Consumption:					
Reported	1,550,000	378,000	119,000	121,000	360,000
Undistributed e/	153,000	24,200	11,800	11,900	35,600
Total	1,700,000	403,000	131,000	133,000	396,000
Exports (lead content):					
Ore and concentrates	181,000	6,710	3,640	NA	11,400 2/
Bullion	3,470	2,530		NA	82 2/
Wrought and unwrought lead	34,700	11,900		NA	4,770 2/
Ash and residues	14,200	187		NA	2/
TEL/TML preparations, based on lead compounds	3,470	3,200	66	NA	70 2/
Exports (gross weight): Scrap	108,000	24,100	6,930	NA	14,300 2/
Platts Metals Week average North American					
producer price (cents per pound)	43.64	43.69	43.65	43.65	43.69

e/ Estimated. NA Not available. -- Zero.

TABLE 2 MONTHLY AVERAGE LEAD PRICES

	North American			Sterling		
	producer price	LN	LME			
	cents/lb	\$/metric ton	£/metric ton	dollars/£		
2001:	_					
March	43.71	498.05	344.80	1.444459		
December	43.66	482.84	335.01	1.441265		
Year	43.64 r/	453.58	300.08	1.515869		
2002:						
January	43.75	512.63	355.67	1.441270		
February	43.65	479.63	337.15	1.422568		
March	43.65	479.76	337.16	1.422925		

r/ Revised.

Source: Platts Metals Week.

<sup>1/</sup> Data are rounded to no more than three significant digits, except prices; may not add to totals shown. 2/ Includes data for January - February only; March data were not available at time of publication.

## TABLE 3 CONSUMPTION OF PURCHASED LEAD-BASE SCRAP 1/

(Metric tons, gross weight)

Item	Stocks February 28, 2002	Net receipts	Consumption	Stocks March 31, 2002
Battery-lead	11,700	78,400	79,600	10,500
Soft lead	W	W	W	W
Drosses and residues	2,560	3,510	3,500	2,570
Other 2/	1,700	1,980	2,080	1,600
Total	16,000	83,900	85,200	14,700
Percent change from preceding month	XX	+7.7	+8.6	-8.4

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

TABLE 4 LEAD, TIN, AND ANTIMONY RECOVERED FROM LEAD-BASE SCRAP IN MARCH 2002 1/

#### (Metric tons)

	Secondary metal content					
Product recovered	Lead	Tin	Antimony			
Soft and calcium lead	46,200					
Remelt lead	W	W	W			
Antimonial lead	20,600	W	W			
Other 2/	W	W				
Total lead-base	86,100	49	489			

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

<sup>1/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2/</sup> Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

<sup>1/</sup> Data are rounded to no more than three significant digits.

<sup>2/</sup> Includes cable lead, lead-base babbitt, solder, type metals, and other products

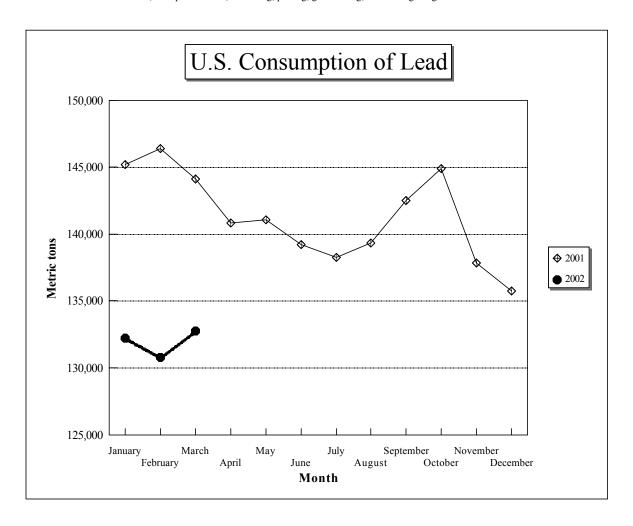
## ${\bf TABLE~5}$ CONSUMPTION OF LEAD IN THE UNITED STATES 1/

(Metric tons, lead content)

	2001	1		2002	
	January -	January -	•		January -
Uses	December	March r/	February	March	March
Metal products:					
Ammunition, shot and bullets	38,500	9,210	4,320	3,430	11,100
Brass and bronze, billet and ingots	3,490	824	289	263	829
Cable covering, power and communication					
and calking lead, building construction	3,770	880	300	292	896
Casting metals	7,410	1,270	656	652	1,960
Sheet lead, pipes, traps and other extruded products	21,800	3,670	1,520	13,300	16,300
Solder	1,560	527	133	116	388
Storage batteries, including oxides	1,400,000	366,000	105,000	97,600	309,000
Terne metal, type metal, and other metal products 2/	6,250	106	117	250	587
Total metal products	1,480,000	382,000	113,000	116,000	341,000
Other oxides and miscellaneous uses	59,000 r/	14,300	6,430	4,930	18,700
Total reported	1,540,000 r/	396,000	119,000	121,000	360,000
Undistributed consumption e/	153,000	39,200	11,800	11,900	35,600
Grand total	1,700,000	436,000	131,000	133,000	396,000

e/ Estimated. r/ Revised.

- 1/ Data are rounded to no more than three significant digits; may not add to totals shown.
- 2/ Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.



# TABLE 6 CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD IN MARCH 2002 1/

#### (Metric tons, lead content)

	Stocks February 28,	Net		Stocks March 31,	
Type of material	2002	receipts	Consumption	2002	
Soft lead	44,800	70,500	70,600	44,700	
Antimonial lead	29,700	29,700	28,300	31,100	
Lead alloys	W	21,800	21,700	W	
Copper-base scrap	W	206	204	W	
Total	84,200	122,000	121,000	85,600	

W Withheld to avoid disclosing company proprietary data; included in "Total."

TABLE 7 U.S. EXPORTS OF LEAD, BY CLASS 1/

#### (Metric tons)

	-		-	2002	
	2001			January -	
	Year	February	January	February	February
Lead content:					
Ore and concentrates	181,000	2,090	7,730	3,640	11,400
Bullion	3,470	489	82		82
Materials excluding scrap	34,700	2,560	1,690	3,080	4,770
Ash and residues	14,200	48			
TEL/TML preparations, based					
on lead compounds	3,470	2,730	4	66	70
Total	237,000	7,920	9,510	6,790	16,300
Gross weight: Scrap	108,000	7,320	7,350	6,930	14,300

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

 ${\bf TABLE~8} \\ {\bf U.S.~IMPORTS~OF~LEAD~BY~TYPE~OF~MATERIALS~AND~BY~COUNTRY~OF~ORIGIN~1/} \\$ 

#### (Metric tons, lead content)

		C	eneral import	s		Imports for consumption				
	20	01	•	2002		20	01		2002	
		January -			January -		January -			January -
Country of origin	Year	February	January	February	February	Year	February	January	February	February
Ore, matte, etc.:										
Other	11,200	2,240				2,240	2,240			
Total	11,200	2,240				2,240	2,240			
Pigs and bars:	•					-	•			
Australia	18,300	100		7,720	7,720	18,600	100		1,100	1,100
Canada	167,000	34,700	12,000	9,440	21,400	167,000	34,700	12,000	9,440	21,400
China	53,100	6,000	9,810		9,810	56,300	6,000	9,810		9,810
Germany	120	54		24	24	120	54		24	24
Mexico	12,400	3,120	38	264	302	12,400	3,120	38	264	302
Peru	2,330	233				2,330	233			
Other	3,260	59		3	3	14,500	2,360		3	3
Total	256,000	44,200	21,900	17,400	39,300	271,000	46,600	21,900	10,800	32,700
Reclaimed scrap, including										
ash and residues	203					203				
Grand total	268,000	46,500	21,900	17,400	39,300	274,000	48,800	21,900	10,800	32,700
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<sup>--</sup> Zero.

Source: U.S. Census Bureau.

<sup>1/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

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